

- 63
- a. $32 \text{ sec} \times 1 \text{ min} / 60 \text{ sec} = 53 \text{ min}$
 - b. $2.4 \text{ lb} \times 1 \text{ kg} / 2.205 \text{ lb} = \mathbf{1.1 \text{ kg}}$
 - c. $2.4 \text{ lb} \times 453.59 \text{ g} / 1 \text{ lb} = 1089\text{g} = \mathbf{1.1 \times 10^3 \text{ g}}$
 - d. $3150 \text{ ft} \times 1 \text{ mi} / 5280 \text{ ft} = 0.597 \text{ mi} = \mathbf{5.97 \times 10^{-1} \text{ mi}}$
 - e. $14.2 \text{ in} \times 1 \text{ ft} / 12'' = \mathbf{1.18 \text{ ft}}$
 - f. $22.4\text{g} \times 1 \text{ kg} / 1000 \text{ g} = 0.0224 \text{ kg} = \mathbf{2.24 \times 10^{-2} \text{ kg}}$
 - g. $9.72 \text{ mg} \times 1 \text{ g} / 1000 \text{ mg} = 0.00972 \text{ g} = \mathbf{9.72 \times 10^{-3} \text{ g}}$
 - h. $2.91 \text{ m} \times 1.0936 \text{ yd} / 1 \text{ mi} = \mathbf{3.18 \text{ yd}}$
- 64
- a. $2.23 \text{ m} \times 1.094 \text{ yd} / 1 \text{ m} = \mathbf{2.44 \text{ yd}}$
 - b. $46.2 \text{ yd} \times 1 \text{ m} / 1094 \text{ yd} = \mathbf{42.2 \text{ m}}$
 - c. $292 \text{ cm} \times 1 \text{ in} / 2.54 \text{ cm} = \mathbf{115 \text{ in}}$
 - d. $881.2 \text{ in} \times 2.54 \text{ cm} / 1 \text{ in} = 2238 \text{ cm} = \mathbf{2.24 \times 10^3 \text{ cm}}$
 - e. $1043 \text{ km} \times 1 \text{ mi} / 1.6093 \text{ km} = \mathbf{648.1 \text{ mi}}$
 - f. $445.5 \text{ mi} \times 1.6093 \text{ km} / 1 \text{ mi} = \mathbf{716.9 \text{ km}}$
 - g. $36.2 \text{ m} \times 1 \text{ km} / 1000 \text{ m} = 0.0362 \text{ km} = \mathbf{3.62 \times 10^{-2} \text{ km}}$
 - h. $0.0501 \text{ km} \times 1000\text{m} / 1 \text{ km} \times 100 \text{ cm} / 1 \text{ m} = \mathbf{5.01 \times 10^4 \text{ cm}}$
- 66
- a. $5.25 \text{ oz} \times 1 \text{ lb} / 16 \text{ oz} = 0.328 \text{ lb} = \mathbf{3.28 \times 10^{-1} \text{ lb}}$
 - b. $125 \text{ g} \times 1 \text{ lb} / 453.59 \text{ g} = 0.276 \text{ lb} = \mathbf{2.76 \times 10^{-1} \text{ lb}}$
 - c. $125\text{g} \times 1 \text{ lb} / 453.59 \text{ g} \times 16 \text{ oz} / 1 \text{ lb} = \mathbf{4.41 \text{ oz}}$
 - d. $125 \text{ ml} \times 1 \text{ L} / 1000 \text{ mL} = 0.125 \text{ L} = \mathbf{1.25 \times 10^{-1} \text{ L}}$
 - e. $125 \text{ mL} \times 1.057 \text{ qt} / 1000 \text{ mL} \times 2 \text{ pt} / 1 \text{ qt} = 0.264 \text{ pt} = \mathbf{2.64 \times 10^{-1} \text{ pt}}$
 - f. $2.5 \text{ mi} \times 1.6093 \text{ km} / 1 \text{ mi} = \mathbf{4.0 \text{ km}}$
 - g. $2.5 \text{ mi} \times 1.6093 \text{ km} / 1 \text{ mi} \times 1000 \text{ m} / 1 \text{ km} = \mathbf{4.0 \times 10^3 \text{ m}}$
 - h. $2.5 \text{ mi} \times 1.6093 \text{ km} / 1 \text{ mi} \times 1000\text{m} / 1 \text{ km} \times 100 \text{ cm} / 1 \text{ m} = \mathbf{4.0 \times 10^5 \text{ cm}}$